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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,419	01/09/2002	Satoshi Hirahara	217791US0XCONT	2581

22850 7590 09/20/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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LISH, PETER J

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/040,419

Applicant(s)

HIRAHARA ET AL.

Examiner

Peter J. Lish

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-11,14-19 and 21-30 is/are pending in the application.
- 4a) Of the above claim(s) 23-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-11,14-19,21,22 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/25/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/31/05 has been entered.

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-11, 14-19, 21-22, and 30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Adachi et al. (US 5,430,606).

Adachi et al. teaches an activated carbon for use in electric double layer capacitors which is made from coconut shells as the raw material. The surface area of the resulting activated

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carbon product is varied by slight alterations in activation conditions, however, it is seen that the process produces activated carbon having BET surface areas of 2001 m<sup>2</sup>/g as well as 2337 m<sup>2</sup>/g (example 2). While neither the average pore diameter, nor the volume of pores having a diameter of 5-30 nm are taught, it is expected that the activated carbon of Adachi et al. exhibits these properties because it is produced from the same raw material and is activated to an equivalent extent to obtain a surface area within the claimed range.

The additionally claimed properties, i.e. the amount of oxygen contained per gram of activated carbon, the total pore volume, the spontaneous potential vs. a lithium electrode, and the rest potential vs. a lithium electrode, are expected to be possessed by the activated carbon of Adachi et al. for the same reasons stated above. Where, as here, the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention, the burden of proof is shifted to the applicant, as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

Regarding claims 10, 15, and 30, the method of making the activated carbon does not limit the material itself.

### ***Response to Arguments***

Applicant's arguments filed 5/31/05 have been fully considered but they are not persuasive.

Applicants argue that the products preferred by Adachi et al. are those activated carbons that are treated within the temperature range of 400 to 500 °C, because these are the carbons that

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are specifically claimed. The applicants subsequently argue that the higher surface area carbons (such as those that meet the presently claimed surface area limitation) require heating at above 700 °C and thereby yield carbons that are undesirable, owing to their poor capacitance resulting from the higher temperatures. However, nowhere does Adachi et al. explicitly teach that the use of higher temperatures is undesirable. Furthermore, it is noted that the capacitance of carbons 2-8 and 2-9 in Table 2, which are heated at 700 °C or greater, are very close to those of carbons 2-2 to 2-4, which are heated at temperatures between 400 and 500 °C. Therefore, it is not seen how the applicants have determined that the high surface area carbons of Adachi et al. are undesirable.

Additionally, it is noted by the examiner that a disclosure is not limited to only the claimed matter. The allowed claims often do not represent the full spectrum of a disclosure due to various circumstances that arise during prosecution. Because the activated carbon product, heated at 700-800 °C, is specifically disclosed by Adachi et al. and appears to meet the limitations of the applicant's claimed product (102 rejection), it need not be taught by Adachi to be the most preferred product.

Regarding the limitations concerning the oxygen content of the activated carbon and the spontaneous potential of the activated carbon against a lithium electrode, it is expected that this property be within the claimed ranges as the carbons are produced from the same material and are activated to an equivalent extent, as shown by their equivalent surface areas. Where, as here, the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which

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anticipate or render obvious the claimed invention, the burden of proof is shifted to the applicant, as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).


Furthermore, the applicant states that the claimed range of oxygen content is achieved by heating the activated carbon to about 1000 °C. However, it is noted from the specification that this heating step does not serve to determine or influence the oxygen content. Rather this heating step is performed in an inert atmosphere and is used to measure the value of the oxygen content. No additional step that would ensure different oxygen content from the activated carbon of Adachi et al. is performed.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Lish whose telephone number is 571-272-1354. The examiner can normally be reached on 9:00-6:00 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

PL

  
STANLEY S. SILVERMAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700